

Competency 4.3 Industrial hygiene personnel shall demonstrate the ability to trend and analyze industrial hygiene-related information.

1. Supporting Knowledge and Skills

- a. Using the appropriate procedures, trend and analyze relevant facility operations information and discuss their relationship to industrial hygiene performance.
- b. Using recognized industrial hygiene performance indicators, determine the type of assessment(s) that should be performed, and in what areas.
- c. Identify and discuss the principal performance indicators that are normally used to review industrial hygiene program performance/effectiveness.

2. Recommended Reading

Review

- DOE Order 210.1, Performance Indicators and Analysis of Operations Information.
- *Industrial Hygiene Auditing: A Manual for Practice*, The American Industrial Hygiene Association, ed. A.J. Leibowitz, 1994.

3. Summary

DOE requires that a program be established which identifies, gathers, verifies, analyzes, trends, disseminates, and makes use of ES&H performance indicators to improve the performance of DOE facilities, programs, and organizations.

Industrial hygienists should choose to track or trend indicators of both program productivity and quality. To a certain extent, they overlap, but indicators more related to productivity might include the number of personnel trained, or the numbers of surveys completed or samples performed relative to a listed plan or goal. Indicators more related to quality might include the number or percentage of workers or operations without the potential for overexposure and the percentages of workers trained or surveys completed relative to a goal.

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Other quality indicators may be scores on standardized audits performed of ongoing operations. More traditional indicators of program quality include injury, illness, or mishap rates, or compensation costs, but a vast majority of these data points do not relate well to industrial hygiene issues, and those that do are lagging indicators, that is, current numbers reflect past mistakes or conditions. In all cases, the data must be both gathered and categorized in a standardized manner in order for comparisons to be defensibly made when tracking and trending.

4. Suggested Exercises

Please refer to Scenarios 2, 5, and 10 in the Scenario section of this document.

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